

# FY2013 Performance and Accountability Report

# **Montgomery County Department of Technology Services**







### **DTS Alignment to County Priority Objectives**

### **DTS Alignment to County Priority Objectives**

- A Responsive and Accountable Government
- Affordable Housing in an Inclusive Community
- An Effective Transportation Network
- Children Prepared to Live and Learn
- Healthy and Sustainable Communities
- Safe Streets and Secure Neighborhoods
- A Strong and Vibrant Economy
- Vital Living for All of Our Residents

### **DTS Headline Performance Dashboard**

Headline Performance Measure	FY12 Results	FY13 Results	Performance Change
Availability of Enterprise Applications System	99.75%	99.77%	
Number of email messages sent and received by County email account holders (in millions)	85.6	84.8	
Number of Enterprise Service Bus data transfers (monthly average in thousands)	7.9	82.3	<b></b>
Average number of seconds to serve a web page	0.50	0.40	1
Percent of DTS Help Desk requests that are resolved on the first call	96.0%	96.8%	
Percent of customers satisfied with Cable Office complaint handling	97%	96%	
Average number of workdays to complete telecom requests	8.7	9.3	<b>—</b>
IT Security - Average system security vulnerabilities per device	49.9	39.2	1
Open Data – Number of datasets published	N/A	24	NEW
Transmission Facilities Application Process: Average number of days to process applications for siting wireless towers	27	30	<b>-</b>





### **DTS At A Glance**

### What Department Does and for Whom

### **DTS Core Function**

DTS, along with its partners in the County's Operating Departments, is responsible for the successful introduction of information technology (IT) to support MCG's strategic goals, as well as the tools and infrastructure needed to deliver world-class services to County residents, its workforce, its retirees, and all County constituents. DTS provides ongoing support to major enterprise programs including Enterprise Resource Planning (ERP), MC311, Integrated Justice Information System (IJIS) and Public Safety Systems Modernization (PSSM).

### **Enterprise Systems and Operations (ESOD)**

Design, implement and maintain a secure and reliable computer-based hardware, software, and data infrastructure for County business systems and County staff. Operate a highly virtualized server infrastructure providing significant performance and capacity gains.

### **Enterprise Telecommunications and Services (ETSD)**

Design, deliver, implement and support network, voice and other communications solutions for County Government departments and numerous Agencies. Support the Public Safety Headquarters project with voice, data and radio communications implementation services. Supported the build out and operations of FiberNet.

### **Enterprise Applications and Solutions (EASD)**

Deliver and maintain communication solutions through core business, web-based applications and geographic information solution services; oversight of Desktop Computer Modernization (DCM) and the County's IT Help Desk. Lead the Web Portal redesign, deploy new web content management system, and develop new governance and web site standards. Re-initiate the desktop PC and laptop replacements and completed a Mobile Computing Pilot Project.

### How Much / How Many

Budget: \$44,721,764; Full-Time Equivalents (FTEs): 133.95

o General Fund: \$26,259,783 104.45 WYs

o Cable Fund: \$ 13,146,951; 29.5 WYs

DCM NDA: \$5,315,030; 0 WYs

Five (5) worksites

One (1) Enterprise datacenter

Two (2) Public Safety datacenters

- Budget: \$11,064,634; FTEs: 31.0
- 680 servers
- 102 Single Sign On applications
  - serving 22 departments
- 183 Enterprise Services Bus exchanges
  - o serving 19 departments
- Enhanced Enterprise System monitoring
- Budget: \$5,356,372; FTEs: 20.05
- 344 FiberNet sites
- 414 Sites with voice and data service
- 13,865 Phone extensions including HOC
- 8,085 Voicemail boxes
- 11 Radio Transmitter-Receiver Sites
- Budget: \$4,931,897; FTEs: 32.30
  - General Fund: \$4,931,897; WYs: 32.30
  - o DCM NDA: \$5,315,030; 0 WYs: 0.0
- 33,183 Help Desk calls received
- 873,657 Security patches applied
- (Avg) 103 Patches deployed per PC supported
- 97,759,212 Web Portal page views
- 11,522,758 Web Portal unique visitors
- 4 quarterly Geo Loads completed for Public Safety
- Deployed openMontgomery and Related Services
- Replaced 2,200+ Computers thru DCM





### DTS At A Glance (cont.)

### What Department Does and for Whom

### Office of Cable and Broadband Services

Manage the County's three cable television franchises and the Cable Communications Plan to ensure funding for quality Public, Educational, and Governmental (PEG) programming, FiberNet, and franchise enforcement; represent the County's and consumers' interests in cable, broadband and telecommunications in federal and state proceedings; seek and implement broadband access and literacy grants; and facilitate the management and coordination of wireless transmission facilities siting.

### **Enterprise Project Management Office (EPMO)**

Provide project management support for the development and delivery of County technology solutions. Facilitate technology project intake review by applying a balanced scorecard approach. Lead openMontgomery visioning, design and pilot implementation.

Lead implementation and support operations of the Integrated Justice Information System (IJIS).

### Office of the Chief Information Officer (CIO)

Provide technology leadership, allocation of resources, policy development and oversight of all programs of the Department and County government Information Technology initiatives.

Enterprise Information Security Office (EISO) performs risk assessments, develops security policies & procedures, manages data security protection tools, and provides security training.

### CIP Programs – Enterprise Technology Components

Lead technical implementation and support operations of the Technology Modernization (TechMod) Program, including ERP and technical Infrastructure implementation.

Lead program development and system implementations of the Public Safety Systems Modernization (PSSM) Program.

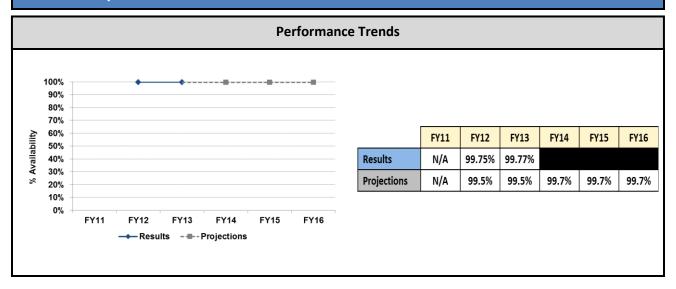
### **How Much/How Many**

- Budget: \$ 13,146,951; FTEs: 29.5
- 73 Wireless site requests processed
- 6 percent of cable construction sites inspected achieving 100 percent code compliance rate
- 1,241 Cable complaints handled with a 96 percent consumer satisfaction rate
- \$47,817 in refunds and credits obtained for cable and broadband subscribers
- Budget: \$2,098,520; FTEs:7.00
- 24 dataMontgomery datasets published
- 7 IT projects reviewed during IT Review
- 8 IT Projects assessed during CIO Approval process
- 2 Department Technical Operations Managers (TOMG) meetings held
- Deployed the dataMontgomery website and initiated activities to develop the Implementation Plan, per
   Open Data Law [Bill 23-12]
- Budget: \$2,808,360; FTEs 14.10
- 64 IT contracts managed
- 472 Enterprise Security vulnerability scans performed
- 10 significant eDiscovery / investigation requests fulfilled
- 3,399 Telework and remote access users supported
- openMontgomery program launched
- Budget: CIP; FTEs 22.0 (CIP)
- 69 ERP Interfaces developed/updated
- 2 PSSM RFPs released
- ERP Business Intelligence production deployed
- Implemented Oracle Learning Management (OLM)
- Implemented Oracle Performance Management
- Implemented Identity Management





(NEW MEASURE) Headline Performance Measure 1: Percent Availability of Enterprise Applications System (this measure replaces "Minutes IT Systems Out of Service")



### **Factors Contributing to Current Performance**

- Ongoing server software upgrades and hardware replacements
- Continual Server monitoring and proactive incident avoidance

### **Factors Restricting Performance Improvement**

- 2-28-13 Power outage backup failed
- 4-29-13 Power outage repair unanticipated consequence
- DGS support limitations
- DTS still catching up from deferred server maintenance
- DTS staffing constraints

### **Performance Improvement Plan**

Enterprise Applications System Availability is the availability of the following applications:

- ERP's Oracle EBS system
- ERP's Oracle EBS self-service system
- MC311 system
- MC311 self-service system
- MCG Internet Portal
- Department of Recreation's Class system

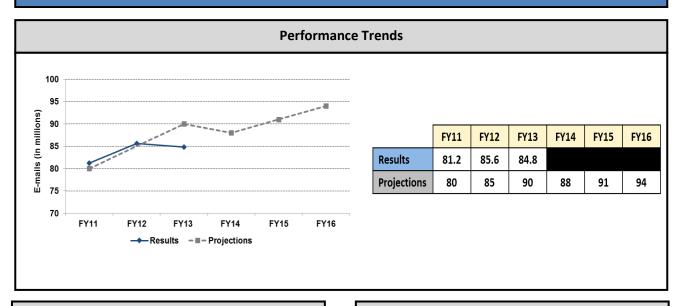
To improve performance, DTS will continue server software upgrades and hardware replacements, and continue to refine the automated monitoring of systems for accurate reporting and take proactive actions to prevent system outages.

DTS is investigating alternative server and application hosting strategies.





<u>Headline Performance Measure 2</u>: Number of email messages sent and received by County email account holders (in millions)



### **Factors Contributing to Current Performance**

- System designed for high availability
- Continual server monitoring, preventive maintenance and proactive incident avoidance

### **Factors Restricting Performance Improvement**

- Age and capacity limits of existing servers
- Cost of new server hardware & software
- PCs with old versions of e-mail client software

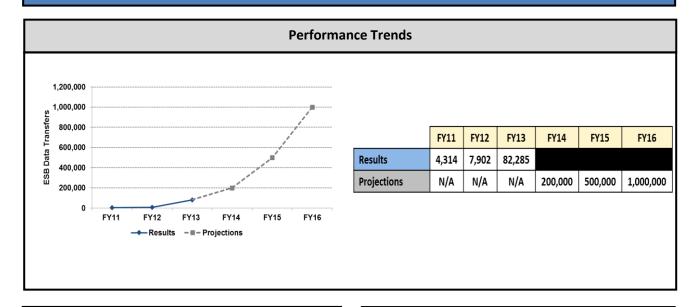
### **Performance Improvement Plan**

DTS is in the planning stages for a move to a cloud-based solution for e-mail. DTS has received high level vendor demonstrations and has contacted regional government reference sites. In addition to increased capacity and functionality, the move will also improve the Disaster Recovery ability of the County's e-mail service. DTS has visited alternative commercial primary/back-up data regional centers and is preparing a recommendation to the CAO.





# (NEW MEASURE) Headline Measure 3: Number of Enterprise Service Bus data transfers (monthly average)



### **Factors Contributing to Current Performance**

- Mature ESB intake
- Proven ESB processes
- Stable high capacity ESB infrastructure
- Highly qualified staff

### **Factors Restricting Performance Improvement**

- Data transfer identification
- DTS and Department resource constraints
- MOU and legal requirements

### Performance Improvement Plan

DTS is continuing to establish ESB interfaces, currently 184, to automate data transfers between multiple systems. Transfers are internal-internal, internal-external, and external-internal. Some transfers include data transformations to meet destination business requirements.

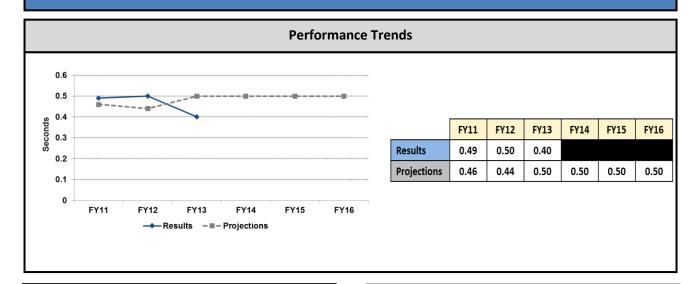
The large increase in transfers is a result of an increase in the number of interfaces, as well as, the frequency of transfers (monthly, weekly, daily, hourly, every minute).

ESB will continue to see significant growth with the implementation of Open Data and cross-agency collaboration efforts.





### Headline Measure 4: Average number of seconds to serve a web page



### **Factors Contributing to Current Performance**

- Design approach geared for ready mobile device support
- Ongoing server software upgrades and hardware replacements
- Continual Server monitoring and proactive incident avoidance

### **Factors Restricting Performance Improvement**

Departments still in process of converting their pages to new Web Portal platform

### **Performance Improvement Plan**

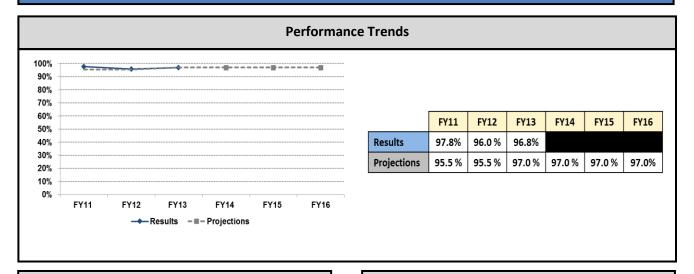
DTS has provided all departments with a new Web Portal design and a new content management system that facilitates the construction of more advanced, graphically rich websites. The new portal was successfully launched with migration to the new architecture and is being proliferated ongoing basis as DTS assists the departments in converting their pages and websites to the new architecture with all available resources and time.

DTS is working with departments to migrate their older applications to the latest architecture which will improve security and reliability.





# <u>Headline Measure 5</u>: Percent of DTS Help Desk requests that are resolved on the first call



### **Factors Contributing to Current Performance**

- Proactive upkeep of Response Plans for Enterprise and Departmental systems
- Performing proactive outreach via Mobile Computing fairs

### **Factors Restricting Performance Improvement**

- Certain calls require escalation to Tier II and Tier III support not provided by the central DTS-managed IT Help Desk
- A small number of calls require desk-side visits to address hardware issues, training issues, etc.

### **Performance Improvement Plan**

DTS works continuously with its DCM vendor to assess opportunities to maintain / improve customer service levels, including first call resolution. Efforts being considered include additional training for help desk staff and review of existing response plans to assure that they're current and contain the appropriate procedures.

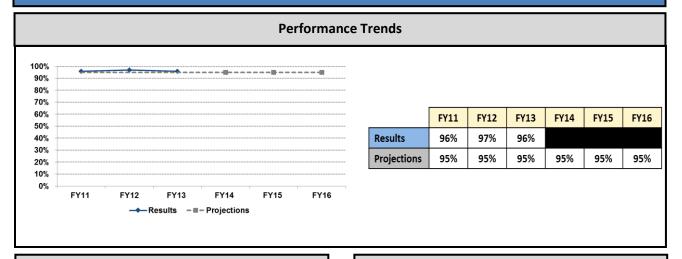
DTS is making a concerted effort to improve services by requesting that all clients open a ticket with the IT Help Desk. We regularly analyze the types of calls the Help Desk is receiving in order to identify systemic issues and gradually degrading service times to identify hardware failure or need for remedial actions and maintenance. Through this process DTS is also able to identify if written instructions and or training is needed by our users in specific areas. Occasionally we are able to identify needs for process improvements in the way the Help Desk handles calls even more effectively.

DTS utilizes a VIP list that tells the Help Desk analyst that the caller is an important or critical user of DTS services and this has resulted in our ability to provide extra customer care and above average follow up. As a result we continue to received accolades and acknowledgements of good customer service.





# <u>Headline Measure 6</u>: Percent of customers satisfied with Cable Office complaint handling



### **Factors Contributing to Current Performance**

- Strong staff commitment to serve consumers
- Enforceable customer service standards

### **Factors Restricting Performance Improvement**

- Responsiveness of cable operator in areas where no enforceable requirement exists
- Power outages affecting delivery of cable and broadband services
- Federal preemption of local regulatory authority

### **Performance Improvement Plan**

DTS has expanded consumer educational outreach to make county residents more aware of complaint resolution services offered by the County, provided updated information available on Cable & Broadband Office website, revised KBAs to make MC311 a more efficient and effective complaint intake tool.

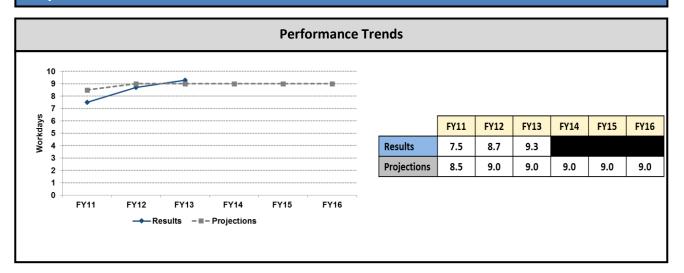
The 6 percent reduction in overall complaints and 28 percent reduction in refunds and credits may be attributable to cable operator efforts to improve handling of complaints and oversight monitoring by the Cable & Broadband Office of those efforts.

The Cable & Broadband Office also notes that overall inspections of cable coaxial and fiber plant in the field decreased 26.6 percent from 5,803 to 4,257 due to a temporary 25 percent work force reduction created by FMLA staff absences and the need to support installation of cable television and video facilities at Public Safety Headquarters and other County facilities. The percentage of cable construction sites inspected dropped from 25 percent to 6 percent due to the need to deploy inspection staff to perform quality control and compliance inspections on new FiberNet construction funded by the American Recovery and Reinvestment Act grant. However, the code compliance rate for non-ARRA cable construction sites improved from 90 to 100 percent, demonstrating the continuing effectiveness of routine inspections as a tool to hold cable companies and contractors accountable for code compliance.





# <u>Headline Measure 7</u>: Average number of workdays to complete telecom requests



### **Factors Contributing to Current Performance**

- An automated service request system that enables the customer to submit requests
- An automated call distribution system that routes calls to available service representatives
- Monitoring of service request queues and follow up

### **Factors Restricting Performance Improvement**

- Multiple major projects competing for resources
- Limited staff resources
- Limited staff experience

### **Performance Improvement Plan**

The Enterprise Telecommunications Services Division (ETSD) continues to be responsive to telephone and radio communications needs. Like other units in DTS and the government, they are stretched to provide the levels of service equal to those provided in the past. To make this possible, DTS has shifted some resources to fill resource gaps in the division and continues to monitor all operating units to see where additional resources are needed.

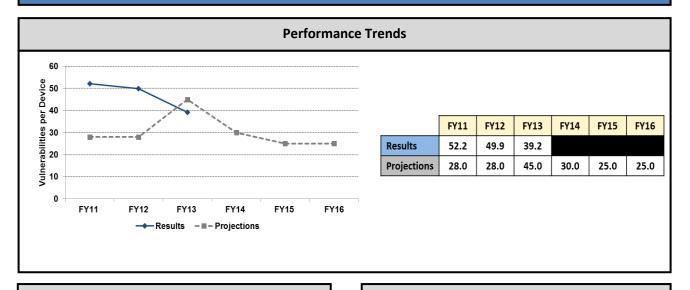
To improve performance DTS will

- Expand the capabilities of the automated service request system
- Provide staff training in telecom best practices and emerging trends
- Incorporate industry standard quality of service, and quality assurance practices into the intake process





## <u>Headline Measure 8</u>: IT Security - Average system security vulnerabilities per device



### **Factors Contributing to Current Performance**

- Continued PC replacements will move County to newer and safer Microsoft Operating Systems
- Increased focus and additional tools for patching PCs with security patches

### **Factors Restricting Performance Improvement**

- Large base of older PCs with older operating system
- Departments have responsibility to patch their non-seat (non DCM) machines, servers and other hardware
- Limited resources limit ability to increase focus and increase department outreach to realize larger gains County-wide

### **Performance Improvement Plan**

DTS is planning to continue to improve ways of patching and remediating the County's large number of PCs and improve the multiple tools and components in the program with multiple improved patching methods and continued focus email spam and virus filtering, browsing filters and security scans.

To reduce vulnerabilities, DCM now patches non-seat machines when possible.

County-wide Security Awareness Training Program will be resumed in FY14.

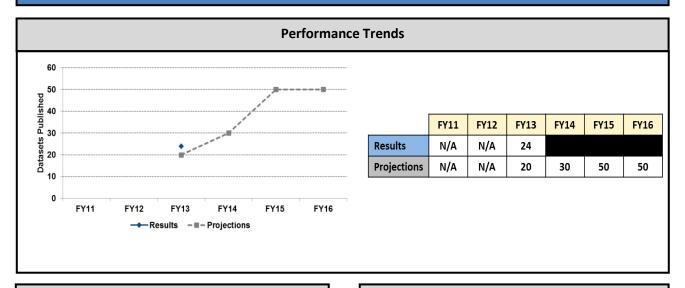
DTS has begun tighter management of Java versions on County PCs. DTS rolled out the latest Java version and has begun removing older versions.

DTS is also focused on the continued replacement of the oldest PCs.





# (NEW MEASURE)Headline Measure 9: Open Data – Number of datasets published



### **Factors Contributing to Current Performance**

- Strong project level support from all levels of government
- Rapid identification and execution on high value datasets for participating departments
- Solid project governance and process

### **Factors Restricting Performance Improvement**

- Availability of resources in DTS and departments owning the datasets
- Complexity of accessing legacy systems and building the queries to get data from systems
- Establishing a common understanding and review for determination of which data needs to be protected for privacy concerns

### **Performance Improvement Plan**

DTS is in the process of developing the Implementation Plan as required by Bill 23-12.

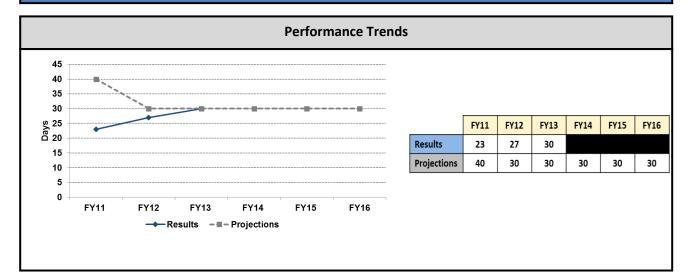
The Implementation Plan will contain an inventory of datasets in the County, by each owning department. The Implementation Plan will also contain a high level publication schedule for publication of each documented dataset.

In developing the publication schedule, each dataset will be evaluated and rated by the dataMontgomery Workgroup on factors relating to their publication value and alignment with the mission of the department.





<u>Headline Measure 10</u>: Transmission Facilities Application Process - Average number of days to process applications for siting wireless towers



### **Factors Contributing to Current Performance**

- Providing information about regulatory process requirements on website
- Streamlining regulatory review process to enable application processing in 30 days
- Dismissing incomplete applications if not corrected within 5 days of filing

### **Factors Restricting Performance Improvement**

- Recession-related reductions in new telecommunications facilities deployment and build out
- Limited technological advances requiring changes to 3G/4G capable antennas
- Explosive growth of mobile broadband services

### **Performance Improvement Plan**

DTS reached out to the Maryland-National Capital Park and Planning Commission to address the need to rezone areas where growth is anticipated, including portions of the Agricultural Reserve, and to create more places where antennas may be collocated or antennas placed by right. However, while the Planning Commission agrees there is a need to plan for future telecommunications growth, this request is beyond the scope at this time of the master plan rezoning effort underway.

The overall number of applications files for review decreased by 28 percent from 209 to 73. This largely reflects the maturity of the systems of most of the County's established wireless service providers to 4G and LTE service, the lack of new entrants into a crowded marketplace, and thus the reduced need to upgrade or install new antennas and towers.





### Responsive and Sustainable Leadership:

Responsive and Sustainable Leadership has been the cornerstone of the County Executive's vision for Montgomery County government. To advance this vision, we have identified eight overarching goals for all County departments:

### 1) Effective and Productive Use of the Workforce/Resources:

Department actively works to effectively and productively use its workforce/resources, including, but not limited to, better management of overtime, implementation of productivity improvements, reduction of ongoing costs, and efficient use of other resources.

- a) 17% increase in average overtime hours used by all full-time, non-seasonal employees. In FY12, DTS averaged 0.44 hours of overtime per full-time, non-seasonal employee to 0.52 hours in FY13.\* (Source: CountyStat)
- b) 0.3 percentage point increase in average Net Annual Work hours for all full-time, non-seasonal employees.\*
   (Source: CountyStat)

\*The values are based on the employee's HR Organization and not assigned Cost Center(s).

### 2) Internal Controls and Risk Management:

Department actively assesses its internal control strengths, weaknesses, and risks regarding compliance with laws, regulations policies and stewardship over County assets. Department reviews and implements Internal Audit recommendations in a systematic and timely manner, and proactively manages risk pertaining to improving workplace safety, decreasing work-related injuries, and reducing County exposure to litigation.

- a) 100% of 4 Audit report recommendations were fully implemented since issuance of the audit report (Source: Internal Audit will provide to CountyStat)
- b) N/A No work related injuries in FY12 or FY13.





### 3) Succession Planning:

Department actively plans for changes in its workforce, in order to maintain continuity of services, develop staff capabilities, maintain and/or transfer knowledge, and enhance performance.

a) List all the key positions/functions in your department that require succession planning (Source: Department)

Division	Number of Critical Positions	% of Positions Where Knowledge, Skills, and Abilities have been Identified	% of Positions with Long Term Plan in Place	%of Total Critical Positions in DTS
Enterprise Telecommunications and Services	6	100%	33%	21%
Enterprise Systems and Operations	7	100%	14%	24%
Enterprise Applications and Solutions	4	100%	25%	14%
Enterprise Resource Planning (ERP)	1	100%	0%	3%
Cable Franchise Administration	3	100%	0%	10%
Office of the Chief Information Officer	8	100%	63%	28%

b) 31% of those identified key position/functions have developed and implemented long-term succession planning (Source: Department)

The Department of Technology Services actively and continually reviews workforce skills to maintain resources that will provide for long-term, progressive performance. Our efforts began several years ago with a department-wide skills assessment and have continued on a routine basis as part of our frequent staffing matrix discussions at leadership meetings. DTS maintains a succession plan and identifies staff backup and rotation needs in all operating units.

### 4) Mandatory Employee Training:

Department systematically monitors and actively enforces employees' mandatory and/or required trainings.

78% of department's employees have fulfilled mandatory County/State/Federal training requirements. (Source: Department)

DTS has updated management review processes and is incorporating planning for and review of mandatory training in performance plans.





### 5) Workforce Diversity and MFD Procurement:

Department actively participates in the recruitment of a diverse workforce and enforcement of MFD procurement requirements.

Workforce Diversity: Technology Services actively participates in the recruitment of a diverse workforce and enforcement of MFD procurement requirements

MFD Procurement: refer to or attach summary yearly report prepared by DGS (Source: Department provides and CountyStat validates) (Link to report)

Total \$ Subject to MFD: \$38,082,690

MFD Utilization: \$11,747,348 % of MFD Utilization: 30.85% % of Total MFD \$: 78.00%

### 6) Innovations:

Department actively seeks out and tests innovative new approaches, processes and technologies in a quantifiable, lean, entrepreneurial manner to improve performance and productivity.

DTS continues to demonstrate the ability to be innovative in technical areas as well as business integration and support. This was clearly demonstrated in the continued Digital Counties recognition, which focused on the use, prioritization and demonstration of Technology assisted innovation in business outcomes and technology designs and operations

The Cable & Broadband Services Office is also piloting innovative new uses of video to enable mobile viewing of live video and short clips on smart phone devices. Video presentations were included for the first time as part of the 2012 Human Rights Hall of Fame induction ceremony and the County's cable channel programming is now viewable on iPad tablet. The Cable & Broadband Office completed studio equipment upgrades to enable television broadcast, live web streaming and video-on-demand storage for all County Council general and committee meetings resulting in a 24 percent increase in hours of locally produced programming and a 13 percent increase in shows produced. The Office also redesigned the CCM website and extensively used social media to promote new programming resulting in a 13 percent increase in unique pageviews on the CCM website and an 86 percent increase in video- ondemand views.

DTS has been active in exploring cloud technologies and has introduced new cloud support services while enhancing the IT Review process to encourage the departments to consider cloud solutions. DTS has engaged two promising cloud vendors and is showcasing their services. The first one relates to communications with the public. DTS implemented a new cloud information delivery service and is encouraging all departments to use it. The second one relates to our office support, where DTS has started investigating e-mail cloud services.





### 7) Collaborations and Partnerships:

Department actively participates in collaborations and partnerships with other departments to improve results beyond the scope of its own performance measures. Please only list accomplishments that had positive results for other department(s) as well.

All Departments – DTS aligned its strategies, architectures and operations management with those of the Information Technology Policy Advisory Committee (IPAC) and the departmental Technology Operations Management Group (TOMG) to achieve the following program goals:

- Developed strong work relationships with departmental technology and business managers
- 2. Created formal communications processes for similar functions (operations & security) between DTS and Department staff
- 3. Developed governance model and initial efforts on the design of a sustaining organization to ensure standardization and formalization of common processes for the long term
- 4. Successfully supported programs in MC311, CountyStat, ERP, DLC, PSHQ, MCPL, DPS and other departments

Public Safety Departments – Public Safety System Modernization Program (PSSM)

DTS is leading the PSSM Program, which achieved the following milestones and accomplishments in FY 2012:

- The PSSM Program Charter was approved by the PSSM ESC. The Program Charter provides a preliminary delineation
  of roles and responsibilities, outlines the overall program objectives, identifies the main stakeholders, and defines the
  authority of the program manager.
- Project Charters for FSA, CAD, and Radio Infrastructure were approved by the PSSM ESC. The project charters are a statement of the scope, objectives, measurable key success criteria, and participants on the project team.
- 800 Mhz rebanding for the radio system was completed.
- Global positioning timing component of the radio infrastructure was replaced.
- A mobile computer assessment was completed to identify the most economic fit to better meet the business needs of MCPD, MCFRS, and the Sheriff.
- The PSSM Program Readiness Assessment was completed through Gartner Corporation.
- The PSSM Program Validation Study was completed. Overall program assessment found each of the projects to be aligned with the County's priorities and the prioritization level of the projects to be justified.

### **County Agencies**

- 1. Maryland National Capital Park and Planning Commission (MNCPPC) (on-going) Joint program to address interagency use, strategy and enterprise advancement of Geographical Information Systems (GIS)
  - a. Completed the GIS Strategic Plan across all Montgomery County agencies
  - b. Implemented the GIS User Governance Board
- 2. Public Schools (on-going)
  - a. Ongoing FiberNet prioritization for the completion of MCPS Elementary Schools for high speed, improved bandwidth to central IT systems.
- 3. Public, Educational, Governmental (PEG) Governance Board (On-Going)
  - a. Continued collaboration with MCPS, Montgomery College, Montgomery Community Media, Rockville and Takoma Park to support joint equipment procurement, interoperability, resource sharing and grant and foundation funding opportunities.
  - b. Coordinate annual goal development and focus (similar to Senior initiatives)
- 4. Transmission Facilities Coordination (on-going)
  - a. Inter-agency support and coordination of communications tower application review and processing for new projects and commercial ventures.

(Continued on Next Page)





### (Continued from Previous Page)

### Inter-Governmental

- One Maryland Broadband Initiative Collaborate with 24 Maryland Counties and the State to
  complete construction of 'middle mile' broadband infrastructure using a \$115 million American
  Recovery and Reinvestment Act (ARRA) grant, with approximately \$11 million invested in Montgomery
  County. Continue to support development of governance and technical requirements to enable
  coordinated regional shared operating, maintenance, for profit leasing, and data center leasing
  through the 9-member Inter-County Broadband Network (ICBN).
- 2. National Capital Region (On-going) Development of Inter-Governmental Solutions for Data Sharing and Communications:

NCRNet – Fiber interconnect between MD, DC and VA government networks

- a. Proof of Concept completed
- Application implementations Video Teleconferencing Completed; CAD-to-CAD In Progress;
   Shared GIS In development and requirements process for the County PSSM initiative for CAD modernization
- 3. Data Exchange Hub (DEH) Standards development for the base architecture and governance model that enables the development of applications utilizing the federated model for data sharing data between jurisdictions.
  - a. Monitor the successful implementation of the Virginia jurisdictions in the CAD to CAD data exchange model
  - b. Begin the implementation of the requirements pursuant to milestones for the Maryland funded (PSIC) GIS data exchange model.
- 4. National Alliances for Public Safety Communications Interoperability
  - a. Telecommunity Focus group on activities of the FCC on National Wireless communications plan
    - i. Public Safety Radio Re-banding
    - ii. Acquisition and support of D-Block radio spectrum (700Mhz) for National public safety network ("FirstNet")
    - iii. Defeat of commercial-public safety "flexibility" proposals that would require public safety to share spectrum with commercial users
    - iv. Ensure local and state government public safety officials are represented on FirstNet Board of Directors
  - b. Maryland State Interoperability Executive Committee (SIEC) participation
    - i. Statewide 700Mhz Radio System Implementation
    - ii. Statewide CAD Implementation
  - c. All Hazards Consortium (National Capital Region) Executive Steering Committee consultation service to begin the development of a demonstration project that will give Montgomery County the attention deserved as one of the leading Public Sector agencies promoting the use of technology along with business process re-engineering to improve Health Care and Health Services offered at the local level.





### 8) Environmental Stewardship:

Department actively makes appropriate changes to workplace operations, workflow, employee behavior, equipment use, and public interactions to increase energy-efficiency, reduce its environmental footprint, and implement other environmentally responsible practices.

a) 12% increase in print and mail expenditures

(Source: CountyStat)

b) 13% decrease in paper purchases (measured in total sheets of paper)

(Source: CountyStat)

c) List your accomplishments and/or expected results (Source: Department)

The Department of Technology Services continued to be a major steward of the environment by practicing and advocating 'Green IT'. DTS has continued to maintain and advance processes to improve the environment through an aggressive implementation of "Virtual Servers". In addition, DTS stepped up efforts on fostering a 'Green environment' in other areas. DTS continues to see benefit from the enterprise policy established to shutdown all PC's on a weekly basis for weekend power savings of 25%. While one of the original requirements of this initiative was to apply workstation patches and fixes, the power savings from the shutdown were an additional benefit to the County and the environment by reducing power consumption by 60%.

Additionally, DTS has been a creative partner in the County's environment improvement plan through its reduction in paper usage and printing. In addition to reducing internal needs for paper consumption, DTS moved to requiring all network printers to be capable of printing duplex, thereby realizing significant improvements in overall paper usage. We then disseminated this to other departments for similar gains.

DTS also continues its environmentally friendly activities in the desktop environment. The current and ongoing contracts for desktop replacement include a disposal process which follows national recycling and redistribution of technology standards.